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 NEWS  1          Web Page for STN Seminar Schedule - N. America
 NEWS  2  DEC 01  ChemPort single article sales feature unavailable
 NEWS  3  APR 03  CAS coverage of exemplified prophetic substances
                  enhanced
 NEWS  4  APR 07  STN is raising the limits on saved answers
 NEWS  5  APR 24  CA/CAplus now has more comprehensive patent assignee
                  information
 NEWS  6  APR 26  USPATFULL and USPAT2 enhanced with patent
                  assignment/reassignment information
 NEWS  7  APR 28  CAS patent authority coverage expanded
 NEWS  8  APR 28  ENCOMPLIT/ENCOMPLIT2 search fields enhanced
 NEWS  9  APR 28  Limits doubled for structure searching in CAS
                  REGISTRY
 NEWS 10  MAY 08  STN Express, Version 8.4, now available
 NEWS 11  MAY 11  STN on the Web enhanced
 NEWS 12  MAY 11  BEILSTEIN substance information now available on
                  STN Easy
 NEWS 13  MAY 14  DGENE, PCTGEN and USGENE enhanced with increased
                  limits for exact sequence match searches and
                  introduction of free HIT display format
 NEWS 14  MAY 15  INPADOCDB and INPAFAMDB enhanced with Chinese legal
                  status data
 NEWS 15  MAY 28  CAS databases on STN enhanced with NANO super role in
                  records back to 1992
 NEWS 16  JUN 01  CAS REGISTRY Source of Registration (SR) searching
                  enhanced on STN

 NEWS EXPRESS MAY 26 09 CURRENT WINDOWS VERSION IS V8.4,
              AND CURRENT DISCOVER FILE IS DATED 06 APRIL 2009.

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* * * * * * * * * * * * * * * * STN  Columbus  * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 15:15:23 ON 02 JUN 2009
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=> file registry
COST IN U.S. DOLLARS                                    SINCE FILE      TOTAL
                                                           ENTRY    SESSION
FULL ESTIMATED COST                                         0.22       0.22

FILE 'REGISTRY' ENTERED AT 15:16:05 ON 02 JUN 2009
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STRUCTURE FILE UPDATES:     1 JUN 2009  HIGHEST RN 1151607-22-5
DICTIONARY FILE UPDATES:    1 JUN 2009  HIGHEST RN 1151607-22-5

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TSCA INFORMATION NOW CURRENT THROUGH January 9, 2009.

  Please note that search-term pricing does apply when
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=>
Uploading C:\Program Files\Stnexp\Queries\10-553946genB.str
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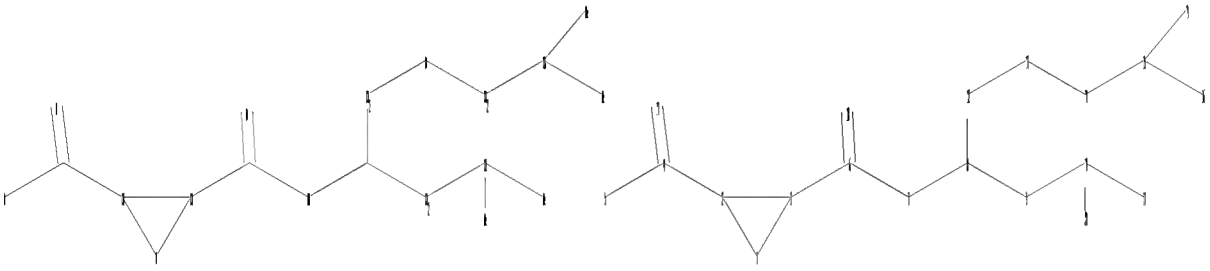

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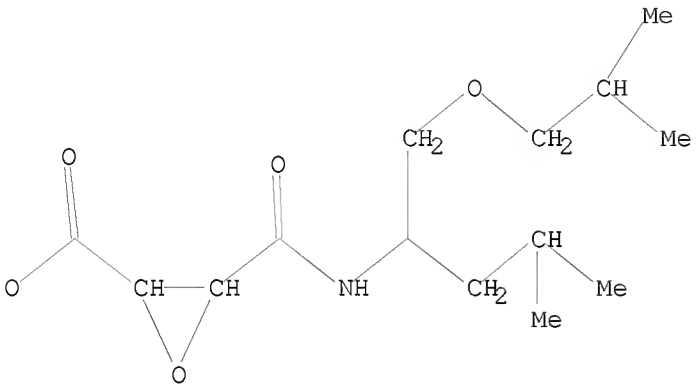
chain nodes :
4  5  6  7  8  9  10  11  12  13  14  15  16  17  18  19  20
ring nodes :
1  2  3
chain bonds :
2-4  3-6  4-5  4-17  6-7  6-18  7-8  8-9  8-12  9-10  10-11  10-20  12-13  13-14
14-15  15-16  15-19
ring bonds :
1-2  1-3  2-3
exact/norm bonds :
1-2  1-3  2-3  4-5  4-17  6-7  6-18  7-8
exact bonds :
2-4  3-6  8-9  8-12  9-10  10-11  10-20  12-13  13-14  14-15  15-16  15-19


Match level :
```

1:Atom 2:Atom 3:Atom 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS
10:CLASS 11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS
18:CLASS 19:CLASS 20:CLASS

L1 STRUCTURE UPLOADED

=> d l1
L1 HAS NO ANSWERS
L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1 sss full
FULL SEARCH INITIATED 15:18:02 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 443 TO ITERATE

100.0% PROCESSED 443 ITERATIONS 19 ANSWERS
SEARCH TIME: 00.00.01

L2 19 SEA SSS FUL L1

=> file caplus
COST IN U.S. DOLLARS SINCE FILE ENTRY TOTAL SESSION
FULL ESTIMATED COST 186.84 187.06

FILE 'CAPLUS' ENTERED AT 15:18:09 ON 02 JUN 2009
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FILE COVERS 1907 - 2 Jun 2009 VOL 150 ISS 23
FILE LAST UPDATED: 1 Jun 2009 (20090601/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Feb 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Feb 2009

CAplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

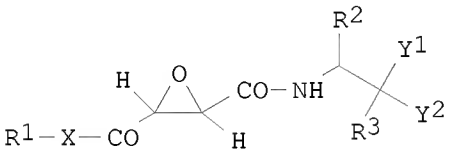
This file contains CAS Registry Numbers for easy and accurate substance identification.

```
=> s l2
L3            6 L2

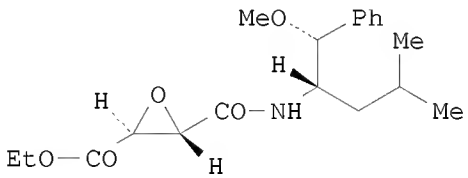
=> s l3 and pd<20030800
      23863500 PD<20030800
                  (PD<20030800)
L4            1 L3 AND PD<20030800

=> d l4 abs ibib hitstr
```

L4 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2009 ACS on STN
GI



I



II

AB Novel epoxysuccinamide derivs. (3-carboxyoxirane-2-carboxamides) represented by general formula (I) or physiol. acceptable salts thereof [wherein R1 and R3 are each H, alkyl, alkenyl, alkynyl, aryl, aralkyl, a heterocyclic group, or alkyl substituted with a heterocyclic group; R2 is alkyl, alkenyl, alkynyl, aryl, aralkyl, a heterocyclic group, or alkyl substituted with a heterocyclic group; X is O or NR4 (wherein R4 is H, alkyl, aryl, aralkyl, a heterocyclic group, or alkyl substituted with a heterocyclic group); Y1 is OR5, SR6 or NR7R8 (wherein R5, R6 and R7 are each H, alkyl, aryl, aralkyl, acyl, a heterocyclic group, or alkyl substituted with a heterocyclic group; and R8 is the same as defined as to R4); and Y2 is H or alkyl, or alternatively Y1 and Y2 may be united to form =O, =S, =N-R9 or =N-OR10 (wherein R9 and R10 are each the same as defined as to R4), with the proviso that the alkyl, aryl and heterocyclic groups defined as to R5 to R10 may each have one or more specific substituents and that the groups defined as to R1 to R10 and Y2 are each specified in the number of carbon atoms] are prepared These compds. inhibit bone absorption and activity of cathepsin L and B (cysteine protease) and are useful for the treatment of bone diseases such as osteoporosis, malignant hypercalcemia, and Paget's disease of bone, arthritis deformans and chronic articular rheumatism accompanied by unusual exasperation of cathepsin B and L activity, and muscular dystrophy and muscular atrophy related to cathepsin B and L. Thus, (2S,3S)-3-ethoxycarbonyloxirane-2-carboxylic acid was condensed with

(S)-1-[(R)-α-methoxybenzyl]-3-methylbutylamine using N-hydroxysuccinimide and DCC in EtOAc at room temperature overnight to give the title compound (II). II at 15 mg/kg p.o. lowered serum calcium by 20.4% in rat.

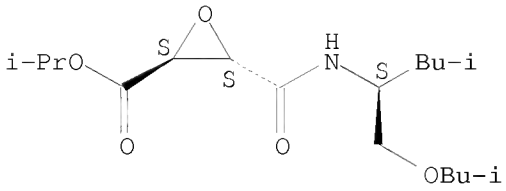
ACCESSION NUMBER: 1999:184251 CAPLUS
DOCUMENT NUMBER: 130:223163
TITLE: Preparation of epoxysuccinamide derivatives for treatment of bone diseases and arthritis
INVENTOR(S): Nomura, Yutaka; Takahashi, Toshihiro; Yoshino, Yasushi; Nishioka, Koichiro
PATENT ASSIGNEE(S): Nippon Chemiphar Co., Ltd., Japan
SOURCE: PCT Int. Appl., 86 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9911640	A1	19990311	WO 1998-JP3983	19980904 <--
W: AU, CA, CN, JP, KR, RU, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9889978	A	19990322	AU 1998-89978	19980904 <--
EP 1022276	A1	20000726	EP 1998-941728	19980904 <--
EP 1022276	B1	20030528		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
AT 241607	T	20030615	AT 1998-941728	19980904 <--
EP 1342720	A2	20030910	EP 2003-11154	19980904
EP 1342720	A3	20040211		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY				
PT 1022276	T	20031031	PT 1998-941728	19980904
ES 2201524	T3	20040316	ES 1998-941728	19980904
US 6387908	B1	20020514	US 2000-508026	20000505 <--
US 20020091131	A1	20020711	US 2002-42994	20020108 <--
US 6689785	B2	20040210		

PRIORITY APPLN. INFO.:	JP 1997-257538	A	19970904
	EP 1998-941728	A3	19980904
	WO 1998-JP3983	W	19980904
	US 2000-508026	A3	20000505

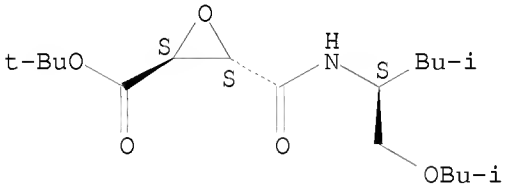
OTHER SOURCE(S): MARPAT 130:223163
IT 221144-15-6P 221144-16-7P 221144-17-8P
221144-18-9P 221144-19-0P 221144-20-3P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of epoxysuccinamide derivs. as bone absorption inhibitors and cathepsin B and L inhibitors for treatment of bone diseases and arthritis)
RN 221144-15-6 CAPLUS
CN 2-Oxiranecarboxylic acid, 3-[[[(1S)-3-methyl-1-[(2-methylpropoxy)methyl]butyl]amino]carbonyl]-, 1-methylethyl ester, (2S,3S)- (CA INDEX NAME)

Absolute stereochemistry.



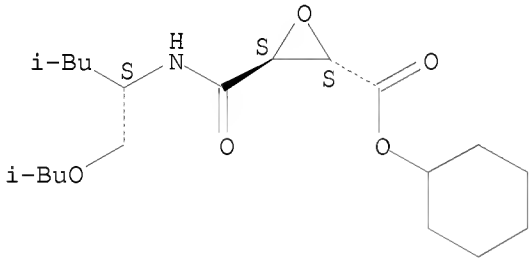
RN 221144-16-7 CAPLUS
CN 2-Oxiranecarboxylic acid, 3-[[[(1S)-3-methyl-1-[(2-methylpropoxy)methyl]butyl]amino]carbonyl]-, 1,1-dimethylethyl ester, (2S,3S)- (CA INDEX NAME)

Absolute stereochemistry.



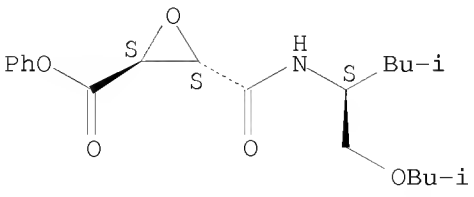
RN 221144-17-8 CAPLUS
CN 2-Oxiranecarboxylic acid, 3-[[[(1S)-3-methyl-1-[(2-methylpropoxy)methyl]butyl]amino]carbonyl]-, cyclohexyl ester, (2S,3S)- (CA INDEX NAME)

Absolute stereochemistry.



RN 221144-18-9 CAPLUS
CN 2-Oxiranecarboxylic acid, 3-[[[(1S)-3-methyl-1-[(2-methylpropoxy)methyl]butyl]amino]carbonyl]-, phenyl ester, (2S,3S)- (CA INDEX NAME)

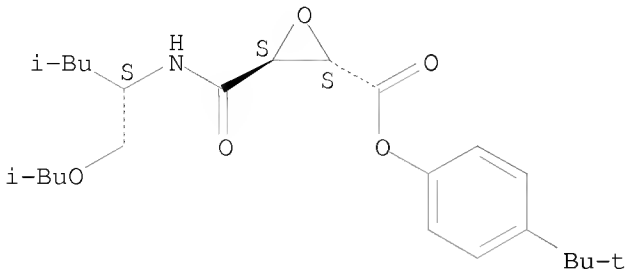
Absolute stereochemistry.



RN 221144-19-0 CAPLUS
CN 2-Oxiranecarboxylic acid, 3-[[[(1S)-3-methyl-1-[(2-

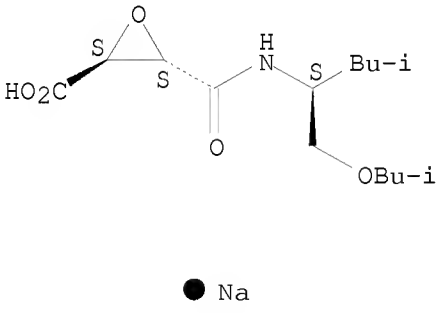
methylpropoxy)methyl]butyl]amino]carbonyl]-, 4-(1,1-dimethylethyl)phenyl ester, (2S,3S)- (CA INDEX NAME)

Absolute stereochemistry.



RN 221144-20-3 CAPLUS
CN 2-Oxiranecarboxylic acid, 3-[[[(1S)-3-methyl-1-[(2-methylpropoxy)methyl]butyl]amino]carbonyl]-, sodium salt (1:1), (2S,3S)- (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 79 THERE ARE 79 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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ALL L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF
LOGOFF? (Y)/N/HOLD:y
STN INTERNATIONAL LOGOFF AT 15:32:07 ON 02 JUN 2009